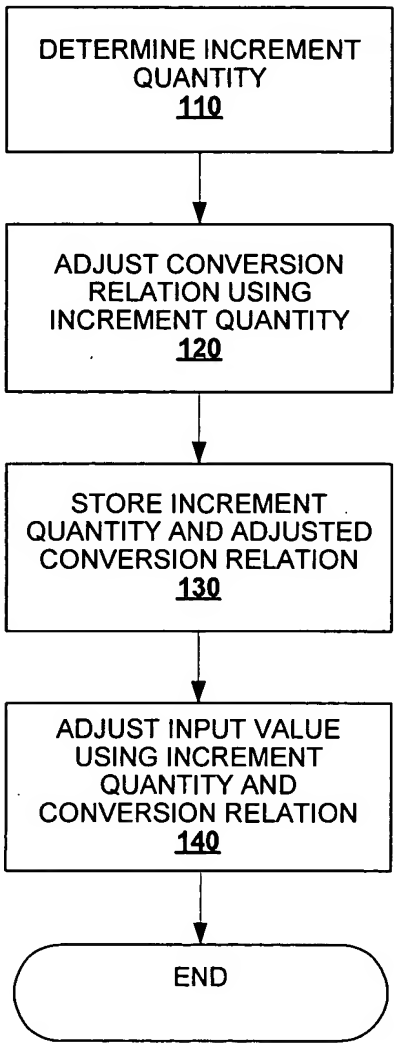
GIVEN:

- Length of Conversion Factor Numerator and Denominator [LCF]
- Degree of Precision for Storage [DPS]
- Conversion Relation Between a Base Unit of Measure and an Alternative Unit of Measure

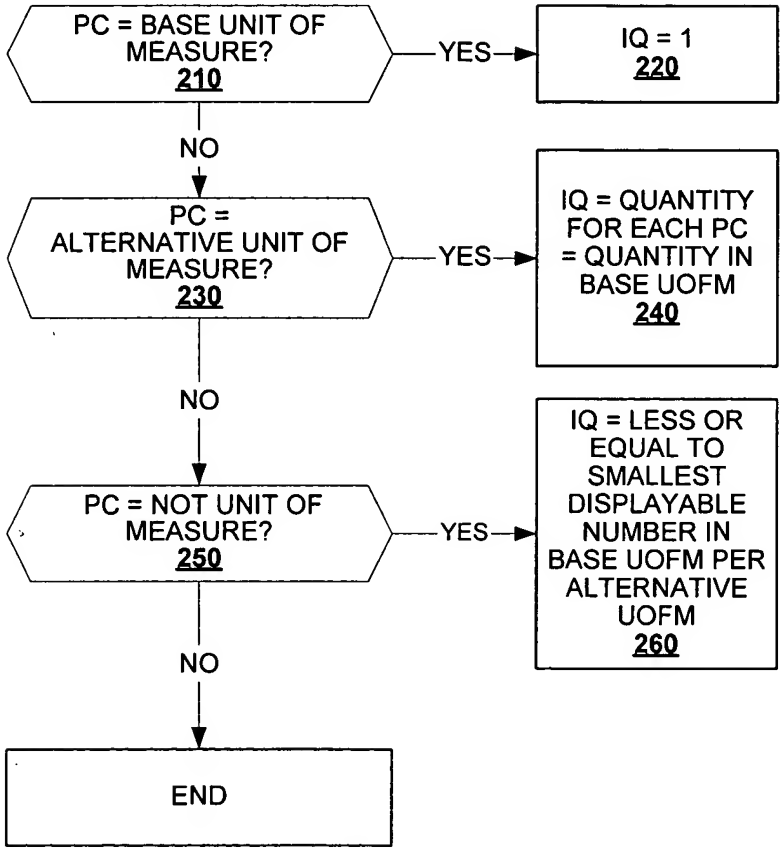


100

FIG. 1

GIVEN:

- Length of Conversion Factor Numerator and Denominator [LCF]
- Degree of Precision for Storage [DPS]
- Conversion Relation



200

FIG. 2

GIVEN:

- Length of Conversion Factor Numerator and Denominator [LCF]
- Degree of Precision for Storage [DPS]
- Conversion Relation (A = B, where A = Quantity in Base UofM (e.g. 3 KG), and B = Quantity in Alternative UofM (16 M)
- Increment Quantity [IQ] (1.4 KG)

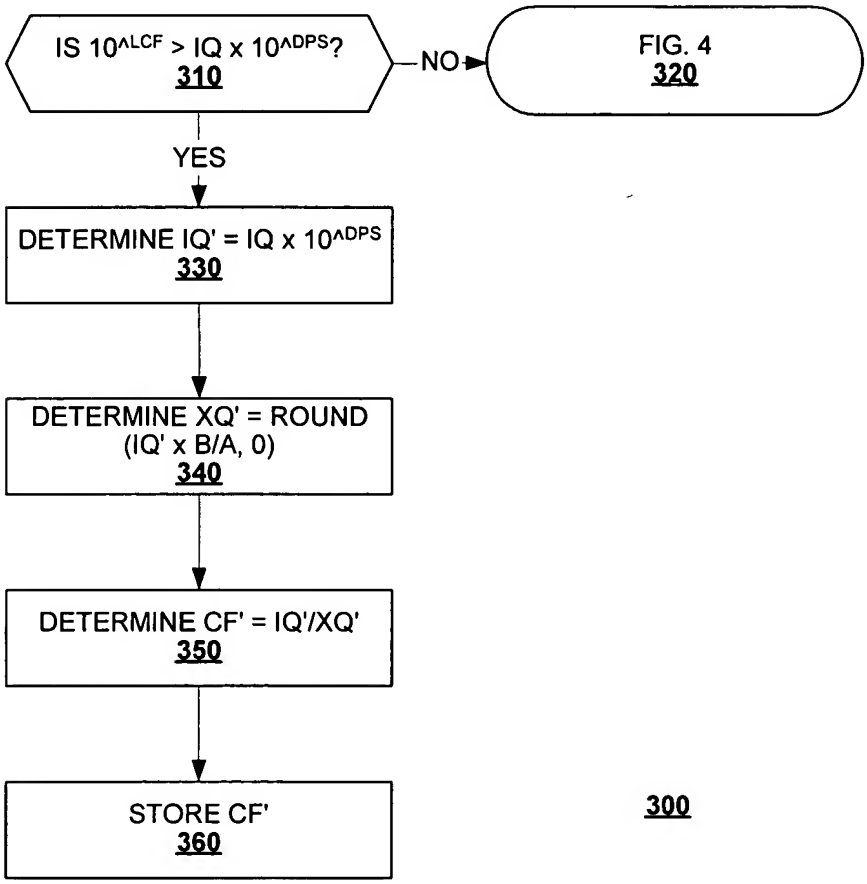
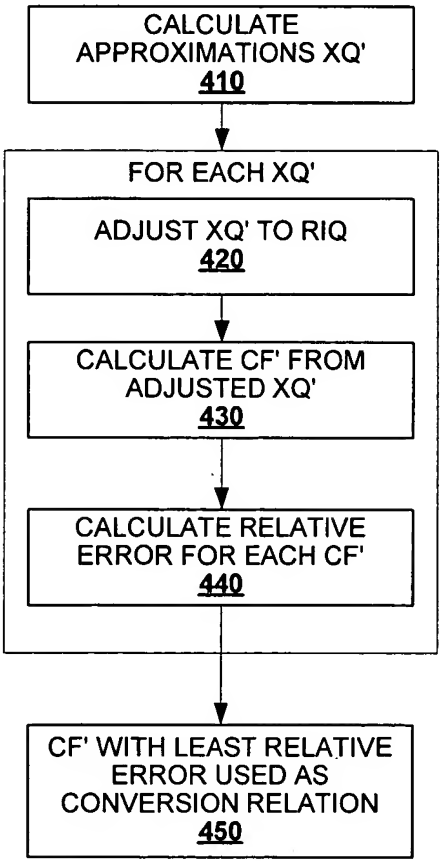


FIG. 3

GIVEN:

- Length of Conversion Factor Numerator and Denominator [LCF]
- Degree of Precision for Storage [DPS]
- Conversion Relation (CF) A=B, A = Quantity in Base UofM (3 KG), and B = Quantity in Alternative UofM (16 M)
- IQ: Increment Quantity = Quantity in Base UofM (e.g. 1.4 KG)
- RIQ: LCM factor (Default = 1)

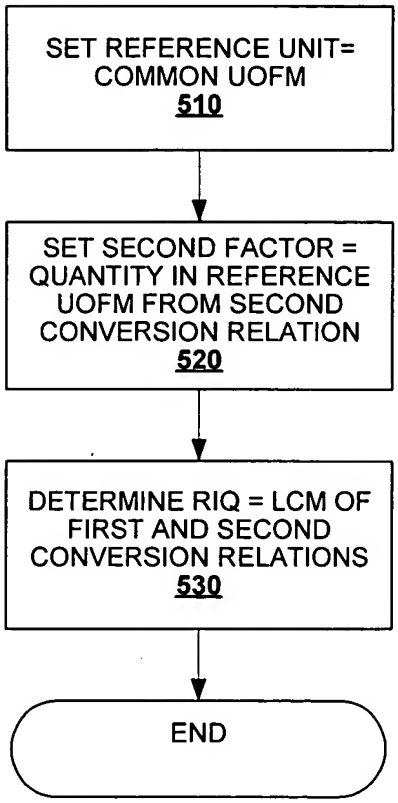


400

FIG. 4

GIVEN:

- Length of Conversion Factor Numerator and Denominator [LCF]
- First Factor having a Common Unit of Measure
- Second Conversion Relation Between the Common Unit of Measure and a New Alternative Unit of Measure



500

FIG. 5

GIVEN:

- Length of Conversion Factor Numerator and Denominator [LCF]
- Degree of Precision for Storage [DPS]
- Conversion Relation
- Degree of Precision for Display

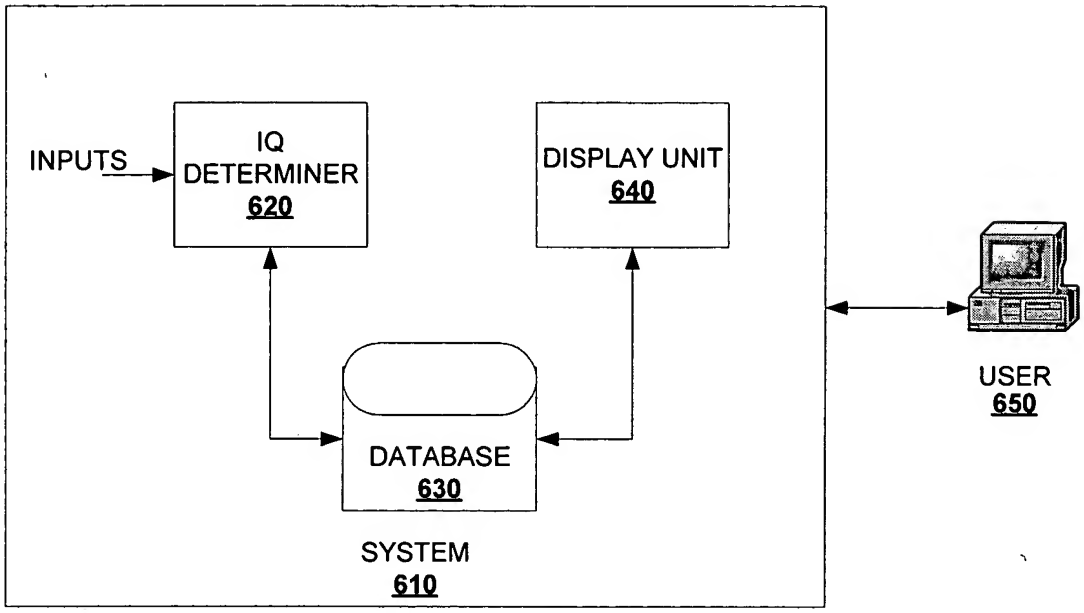


FIG. 6

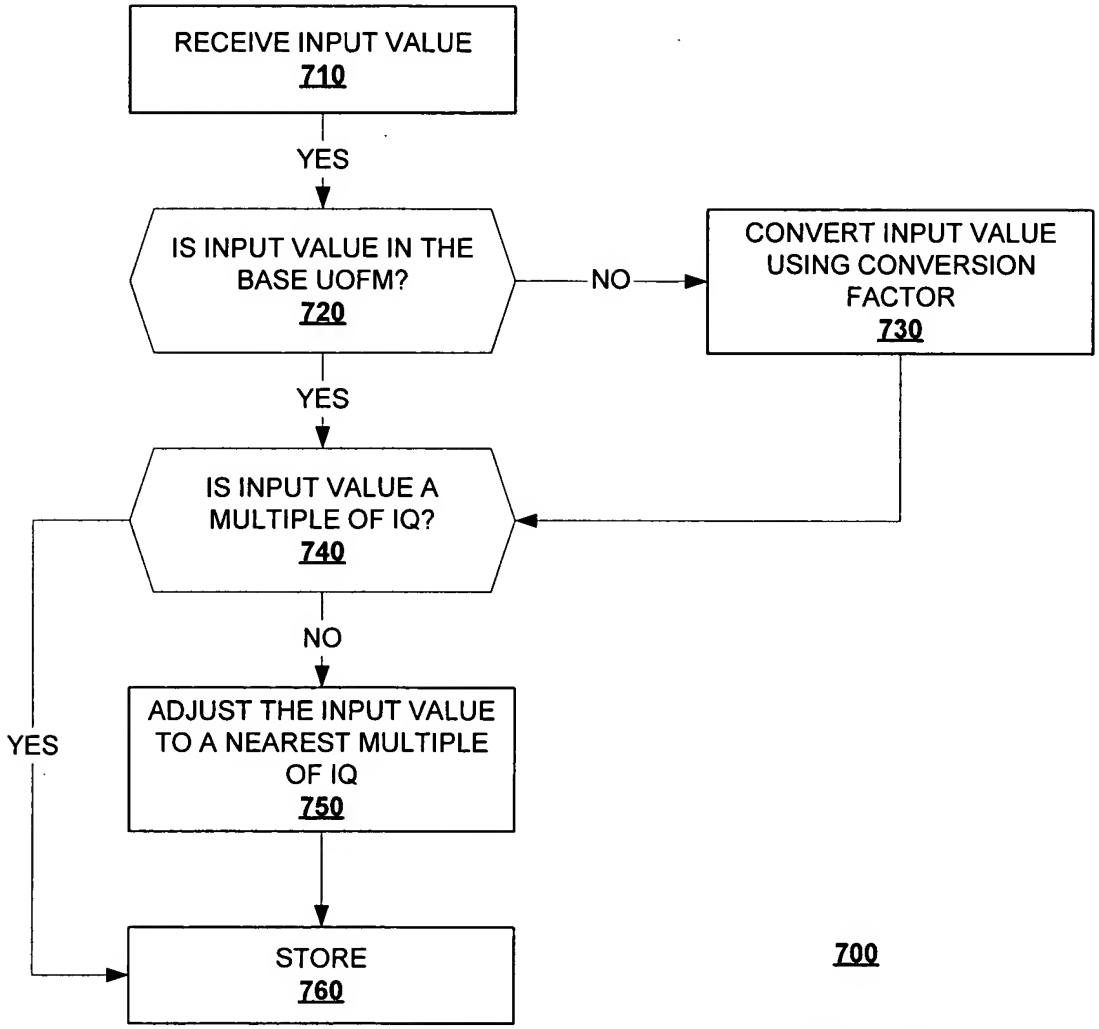

RECEIVE INPUT VALUE
710
YES
IS INPUT VALUE IN THE BASE UOFM?
720
NO
CONVERT INPUT VALUE USING CONVERSION FACTOR
730
YES
IS INPUT VALUE A MULTIPLE OF IQ?
740
NO
YES
ADJUST THE INPUT VALUE TO A NEAREST MULTIPLE OF IQ
750
STORE
760
700

FIG. 7